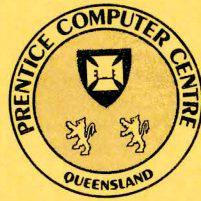


# PRENTICE COMPUTER CENTRE

UNIVERSITY OF QUEENSLAND, ST. LUCIA, QUEENSLAND, AUSTRALIA. 4067.



## NEWSLETTER

N-286

5-December-83

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Authorized by the Director of the Computer Centre



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## **Obituary – Robert Morrison**

It is with deep regret that we report the death of one of the Centre's programmers, Robert John Morrison who passed away on the 16th November, at the age of 23.

After graduating in Computer Science, Robert joined the staff of the Centre as a Trainee Programmer in August 1981. During his years on the staff he worked in a number of areas in the Centre including the mini-micro group and, most recently, in software maintenance. In all the areas of his work he was held in very high esteem by both colleagues and clients as a competent programmer and cooperative, helpful advisor to all who sought his assistance. Robert died in the Prince Charles Hospital after an illness of some weeks.

With his passing, the staff and clients of the Centre have lost a valued professional colleague and good friend.

*John Noad  
Deputy Director*

### **1. Newsletter Summary**

- Details are provided of systems availability over the Christmas break.
- If you have not accessed an off-line file since 1 January it will be transferred from disk to tape.
- Another warning on what will happen to you, your project and files if you don't renew your project by 24 December.
- The Compugraphic 8400 Phototypesetter cannot process lengths of bromide film greater than 6 metres. It is recommended that smaller files be used!
- A new version of QEDIT for RSX11M users is notified.
- Network faults have been caused by parity errors on two of the KL10 front end communications processors and software problems on the VAX 11/780.
- There is more information on how to use AUSTPAC, the Telecom Australia National Packet Switch System through our gateway node.
- A temporary solution to the problem of file transfer between the KL10 and CSIRONET is provided. A permanent fix will be made when a new version of the spooling system is introduced.
- Details are provided of courses to be conducted during January and February.
- A Merry Christmas and a Happy 1984.

*Director  
extension 2189*

### **2. System Availability over Christmas Break**

The KL, KA, VAX and CAD/CAM systems will be available for operator attended running between the hours of 9am and 5pm on 28, 29 and 30 December, 1983 and for unattended running at other times.

The Batch Station in the Hawken Building will be open during attended running times. The Client Room in the Commerce Building will be closed from 23/12/83 until 3/1/84.

Sandra Campbell  
extension 3471

### **3. Removal of Files from Offline Area**

All offline files not accessed since 1 January 1983 will be removed to tape at the end of December 1983.

The monitor command TDIRECT will give details of files removed to tape. If you require any of these files please complete a File Retrieval form (for files skimmed to tape) available at the Centre. The return of these files will take no longer than one week.

Sandra Campbell  
extension 3471

### **4. Expiry Date on Project Programmer Numbers**

On 24 December each year all PPN's on the DEC-10's and UIC's on the VAX expire, unless the Centre has been notified in writing that a PPN/UIC is required for another year. The term "expire" means that all files owned by that PPN, both on-line and off-line, are deleted, any balance of commitment is taken to 0 and PPN and charge code are deleted from the system. As you can imagine then, it is imperative that if you intend to keep using your account for the following year you must complete the "change of expiry date" form, prior to 24 December each year. Separate forms for KA/KL and VAX users are at the Accounts office.

We do this not to make life difficult for you, but merely to keep disk space clear and overheads down. Each year many people leave the University or go away on the Special Studies Programme, or finish post graduate research and omit to notify us that they have finished with their account. Expiring accounts is our way, then, of keeping the system operating efficiently for the users' continued benefit.

To acknowledge receipt of all "change of expiry date" forms is not possible, due to the increase in workload that that would involve.

However, if when logging in after 25-OCT-83 you do not receive the message "PPN will expire in x days", you know that your form has been received and acted upon.

If you **do** receive this message after 25 October, then a form should be submitted to accounts to ensure that your PPN/UIC is continued into 1984.

Carol Walker  
extension 2188

### **5. Compugraphic 8400 Phototypesetter**

Due to a limitation of the Compugraphic 8400 phototypesetter it is only possible to process lengths of bromide film of 6 metres or less. This is because the light-tight take-up cassette for holding the exposed film can only hold this length before jamming. Controlling this has proved to be rather difficult, and this problem could

cause rather disastrous results for any user whose output file produced output of anything greater than this 6 metre limit. Because of this JUSTIF (the program used to produce your typeset output files) has now been upgraded to print a warning message if you are setting to the 8400 typesetter and your output will be greater than 3 metres in length. Since the actual length is given normally as part of the JUSTIF terminal output, if you receive the warning message, but consider your output is only marginally too large, then **at your own risk** you may still queue your file for setting. The file will still typeset correctly but could become jammed in the normal post-setting processing. If you wish to take this chance the system will not stop you.

Files with an output length of greater than 6 metres in themselves should not be queued for typesetting. The spooler will attempt to prevent any problems with large files by splitting your output, but due to severe limitations in the hardware status indications provided by the typesetter this can not be guaranteed. Should the spooler be required to split your output this will cause an additional cost for the job because of the extra job header and trailer messages involved.

In general, it is much more efficient and cheaper if you work with many smaller files (i.e. chapters, sections, pages) since any changes that are later required are usually restricted to small sections of text, and processing a large document several times for these corrections makes the entire process very expensive. You can combine many small files together into one typeset job request if you prefer, and these will be handled correctly. You do this by using a command of the form:

`"/cg myjob/noheader=file1,file2,file3..."`

where "myjob" is only the name of your typeset output job – it does not have to correspond to any file that are working on.

If you follow the guideline of using small files for your typesetting work you should never experience the trauma of having your output jammed in the developing process, and save yourselves money – and who doesn't want to do that?

Andrew Broughton  
extension 2837

## 6. New Version of QEDIT for RSX11M

(This article is intended only for users of RSX11M)

Version 5.1 of QEDIT was released for use on 8 November 1983. It incorporates an increase in the maximum line length to 300 characters, and the addition of the QCHANGE (as for KL-10) and the LINE command.

The format of the QCHANGE command is:

`QChange +-n /string1/string2/`

This changes the first occurrence of string1 on each of n lines to string2, but queries each change, giving the option of cancelling the change and/or the command.

The format of the LINE command is:

`LINE n`

This goes to line number n (absolute), and types it out. If LINE is entered alone, QEDIT will type out the line number and the length of the line you are currently on.

Bug fixes now allow QEDIT to be used across the network where <cntrl-C>'s can't be trapped.

Copies of QEDIT Version 5.1 will be supplied upon request to me. Any queries should be directed to Ron Nilsson, x3344.

*Danny Smith  
extension 3022*

## **7. Network Unreliability**

Recently there have been problems of unreliability of the network due to a combination of hardware faults and software errors in two of the KL10 front ends.

Nodes DN87SA(10) and DN87SB(11) have both had memory parity errors which have been difficult to track down.

Network service to the VAX-11/780 has suffered due to a couple of software errors in the DECNET Compatible Port (that part of the network software which translates between the DECNET protocols used by RSX-11/M and VAX/VMS and the ANF-10 protocols used by the DECsystem-10). The latest of these was discovered on Monday 14 November when a new version of DECNET-VMS was installed on the VAX-11/780. This release of DECNET used a DECNET facility which has not ever been used by any previous implementation of DECNET and this facility was not properly implemented in the DECNET Compatible Port.

Work is continuing to remove a number of minor errors in the DECNET Compatible Port. Unfortunately, fixing some of these errors requires extensive code changes and therefore cannot be done quickly.

Network problems should be reported by phoning Bryan Claire (ext. 4078) or by sending mail on the DECsystem-10 to NETWORK.

*Arthur Hartwig  
extension 4079*

## **8. Further AUSTPAC News**

The AUSTPAC gateway (node AUSTPAC(22) on the network) is now available for general use. Telecom is planning to bring AUSTPAC into full commercial service from 1st February 1984. The most important implication is that charging will commence from that date. AUSTPAC usage is currently "free" except for the charge for the line from each subscriber installation to the AUSTPAC packet switching exchange. From the 1st February 1984 Telecom will levy charges for "calls" to other subscribers. The call charge will be calculated on the call duration and the amount of data sent and received. Once Telecom begin charging the Computer Centre, the Centre will be charging its users who use AUSTPAC through the Computer Centre gateway. (For the remainder of this article the term "gateway" should be taken to mean the Computer Centre gateway to AUSTPAC, i.e. node AUSTPAC(22) unless otherwise stated, e.g. the CSIRONET gateway).

Since charges for AUSTPAC use begin on 1st February 1984 all current gateway user accounts will be cancelled on 31st January 1984. In January 1984 information will be sent to all users who have an AUSTPAC account informing them of the procedure to set up new AUSTPAC accounts so that they may be billed for AUSTPAC usage.

### **8.1 AUSTPAC Addresses**

Each computer connected to AUSTPAC has been assigned a unique 9 digit number which is an abbreviated form of the full international number used on public packet switching networks. The full international number is assigned according to the in-



ternationally agreed standard X.121 which defines a 12 digit number and declares that the first 3 digits are the country code (505 for Australia, 234 for the United Kingdom, 240 for Sweden etc.), the fourth digit is a code for the particular network within the country (2 for AUSTPAC) and the remaining digits (the fifth through twelfth) are the network terminal number, unique within the network. The gateway's full X.121 address is 505273720000 where 505 is the Australia country code, 2 is the AUSTPAC code within Australia and 73720000 is the AUSTPAC network terminal number.

AUSTPAC has adopted the convention that addresses may be specified in either of two ways:

1. The "national address" consisting of the national network number (2 for AUSTPAC) followed by the network terminal number. The gateway has address 273720000 in this scheme.
2. The "international address" consisting of the prefix "0" followed by the full X.121 address. The gateway has address 0505273720000 in this scheme.

Because AUSTPAC uses two addressing schemes, calls to computers outside Australia must always specify a "0" prefix (or "escape code") before the full X.121 address to ensure AUSTPAC routes the call request to the OTC international gateways to other countries' public packet switching networks.

Because the full X.121 address is an unwieldy thing and not easy to remember, the gateway allows sites to be called by name, but this is of help only to users who wish to call other sites from the University networks. Users who wish to call a computer on the University network from "outside" will have to make do with what is provided by their computer system and in most cases this will mean that you will have to remember the 9 digit number!

## **8.2 Dial-up Access to the University Network from AUSTPAC**

The University network may be readily accessed from anywhere in AUSTRALIA by dial-up to a special AUSTPAC computer called a PAD. The charge rates are independent of the distance from the caller to the called computer and are based on volume of data sent and received and the duration of the call. The highest AUSTPAC call duration rate is 5.5c a minute which is cheaper than even the cheapest STD rate for calls over 50km.

The AUSTPAC PAD may be called over the telephone network from anywhere in AUSTRALIA (even from manual exchanges!) by calling 01921 for terminals operating at 110, 150, 200 or 300 bps, 01922 for terminals operating at 1200 bps full duplex. A third number (01923?) has been reserved for use by terminals operating at 1200/75 bps. The 1200/75 bps service is not yet available but should be available by the end of the year.

After dialing the AUSTPAC number, the AUSTPAC PAD should answer the call. Then set the modem into "DATA" mode, and AUSTPAC should type the greeting "AUSTPAC" and then be ready to accept a command. However if you called 01921 you will need to type an upper case "H" character followed by a "return" so that the PAD can work out the speed of operation of your terminal, then it will type the "AUSTPAC" greeting.

Then issue a PAD "CALL" command so that your terminal will be connected to the gateway. The required form of the call command is:

?273720000Dpj/pg

where "pj/pg" is your gateway ppn. The gateway will then prompt for your gateway password. After you have typed your password the gateway should prompt with:

AUSPAC(22)CMD>

indicating it is ready to accept a command.

The PAD is a particularly terse computer which is not very friendly or helpful. If you complain about this to the Computer Centre we will have to direct you to Telecom since they own and operate the PAD. Telecom will probably tell you that the PAD conforms to international standards and they are not prepared to make it not conform. If you can get the international standards changed Telecom will go with that, but such a change won't come overnight. If you wish to use AUSTPAC by dial-up you must put up with the PAD as it is for the foreseeable future.

Now follows an example of PAD dialogue along with some explanatory comments. The comments are the lines beginning with the ";" character. In the comments "<cr>" indicates a stroke of the "carriage return" or "return" or "enter" key.

;If terminal speed <= 300bps type "H<cr>" so PAD can

;determine terminal speed. This will not be echoed.

AUSTPAC

;Call the gateway

?273720000

CLR DTE 017

;Oops, gateway refused call. Oh! I forgot my PPN, try again

?273720000D777/1

;PAD types "COM" to indicate the gateway has accepted the call.

COM

;Gateway prompts for my gateway password

Password:

;Password was correct, gateway types its greeting message

University of Queensland gateway from AUSTPAC

Node AUSTPAC(22) V10(152/0) - 19-Nov-83 [For HELP type HELP followed by a carriage return]

;Give a HELP command to see what can be done.

[AUSTPAC(22)]CMD>HELP

You are connected to AUSTPAC(22)the ANF-10 to X25 Network Gateway.

[Version - V10(152/0) - 19-Nov-83 ]

For help on any command type "HELP <command name>".

Commands are:-

|               |                                                        |
|---------------|--------------------------------------------------------|
| SET BREAKIN   | Redefine the BREAK-IN or Escape character              |
| CALL          | Establish a connection to a other X25 host             |
| CLOSE         | Clear down an X25 call                                 |
| CLR           | Clear down an X25 call                                 |
| CONNECT       | Establish a connection to a other X25 host             |
| CONTINUE      | Leave BREAK-in mode                                    |
| CSTATUS       | Status report on current call                          |
| DIRECTORY     | Short list of X25 sites we know by name.               |
| DISCONNECT    | Close the connection to a DEC-10 network host          |
| HELP          | Provide information on these commands                  |
| SET HOST      | Connect to a DECsystem10 network host                  |
| SET INTERRUPT | Redefine the character used for INTERRUPT or Attention |
| LOG           | Identify the user for accounting purposes              |
| LOGIN         | Identify the user for accounting purposes              |
| LOGOUT        | Cancel the effect of LOGIN                             |
| LSTATUS       | Show the status of the communication lines             |
| NETWORK       | Show the current state of the DECsystem-10 network     |
| NO            | Modifies the effect of some commands                   |



|              |                                                   |
|--------------|---------------------------------------------------|
| NODE         | Show the current state of the DECsystem10 network |
| PARAMETER    | Show the XXX terminal parameters                  |
| RESET        | Issue an X25 RESET                                |
| SEND         | Send a message to the operator                    |
| SET          | Introduce various subcommands                     |
| STATUS       | Status report on current call                     |
| SET TERMINAL | Set terminal characteristics                      |
| TIME         | Display the gateway uptime                        |
| TSTATUS      | Show the XXX terminal parameters                  |
| SET TTY      | Set tty characteristics = Set terminal            |

SET TERMINAL commands are:-

|          |                                                       |
|----------|-------------------------------------------------------|
| CRLF     | CRLF when line width reached                          |
| CRT      | Echo backspace,space,backspace on delete              |
| ECHO     | Enable echoing                                        |
| LC       | Enable lower case translation                         |
| LINEMODE | Say terminal cannot support single character working  |
| NO       | Negate any of the others                              |
| NOT      | Just like NO                                          |
| PAGE     | Terminal can respond to XOFF and XON flow control     |
| TABS     | Terminal has hardware tab stops                       |
| TAPE     | Terminal is in paper-tape mode                        |
| TENMODE  | DEC-10 compatability mode (Host does all the echoing) |
| WIDTH    | Terminal has a carriage that is N wide                |

End of Command List

[AUSPAC(22)]CMD>SETXXX

;After "SET" I typed ^U to rub-out the line. The PAD echoes the ^U with XXX

;Now try a "NODE" command to see where I can get to

|      |            |                      |                 |                 |                 |
|------|------------|----------------------|-----------------|-----------------|-----------------|
| NODE |            |                      |                 |                 |                 |
| NODE | AUSPAC(22) | DN82 V22(145)        | 20-June-80      | Command Decoder |                 |
| NODE | DN87SA(10) | DN87S V22(145)       | 20-June-80      |                 |                 |
| NODE | UQKL10(1)  | Prentice Dual KL 701 | 10-18-83 701    | 10-18-83        | Command Decoder |
| NODE | COMERC(20) | DN82 V22(145)        | 20-June-80      |                 |                 |
| NODE | DN87SB(11) | DN87S V22(145)       | 20-June-80      |                 |                 |
| NODE | UQVAX(3)   | PCC VAX/VMS          |                 |                 |                 |
| NODE | EDUCAT(33) | Education RSX-11/M   |                 |                 |                 |
| NODE | DN87SC(12) | DN87S V22(145)       | 20-June-80      |                 |                 |
| NODE | UQKA10(6)  | Prentice 603A-SLOTS  | 04-22-82        | Command Decoder |                 |
| NODE | DN87SD(13) | DN87S V22(145)       | 20-June-80      |                 |                 |
| NODE | S4PRIN(24) | DN82 V22(145)        | 20-June-80      |                 |                 |
| NODE | DPVAX(35)  | Administration       |                 |                 |                 |
| NODE | QIMR(45)   | Q.I.M.R. RSX-11/M    |                 |                 |                 |
| NODE | BIOCHM(44) | Biochemistry RSX-11/ |                 |                 |                 |
| NODE | CS87(25)   | DN87 V20(74)         | 30-OCT78        |                 |                 |
| NODE | GRIFIN(50) | DN82 V22(145)        | 20-June-80      |                 |                 |
| NODE | GUDATA(51) | GU Data Entry        |                 |                 |                 |
| NODE | GUSIA(52)  | GUSIA                |                 |                 |                 |
| NODE | CSIRO(70)  | GATEWAY V1.44        | Command Decoder |                 |                 |
| NODE | CHEM(41)   | Chemistry RSX-11/M   |                 |                 |                 |
| NODE | CHEM2(42)  | Chemistry RSX11/M    |                 |                 |                 |

;I want to use the KL DECsystem-10

[AUSPAC(22)]CMD>SET HOST UQKL10

;Now the greeting from UQKL10

Prentice Dual KL 701A 36 10:28:28 TTY121 system 2236/643

Connected to Node AUSPAC(22) Line # 2

Please LOGIN or ATTACH

LOG 777/1

Job 103 Prentice Dual KL 701A 36 TTY121 Node 22 Line 2

Password:

A/c balance is \$480.19

[Updated 18:28:36 18-Nov-83]

Charge no. 1222

Cost limit \$10.00

Seq. no. 52340

10:29:05 21-Nov-83 Mon

;Now when I am finished and logged out from the DECsystem-10  
;terminate everything cleanly by typing ^PCLR (control-P followed  
;by "CLR" to tell the PAD to clear the call.

### **8.3 Non Dial-up Access to the University Network over AUSTPAC**

Most dial-up users will not have individual accounts with Telecom (since Telecom at present will issue accounts only to people wishing to use AUSTPAC to get to overseas networks) so their calls from the AUSTPAC PAD will be "reverse charge" calls, that is the Computer Centre will pay their AUSTPAC charge. This is why a PPN must be quoted and a password so that the Computer Centre can bill the caller.

AUSTPAC users with their own dedicated asynchronous line to AUSTPAC or with a "packet mode terminal" connected to AUSTPAC need not make reverse charge calls to the gateway. (Indeed they will find it cheaper not to since the gateway bills all incoming reverse charge calls at the duration rate for dial-up calls which is 10 times higher than the duration rate for calls from dedicated lines. This is because it is not easy to tell whether a call is from a dedicated line or a dial-up line.) Calls to the gateway which are not reverse charge calls shouldn't quote a PPN or password, since the gateway won't ask for either. Such users should merely call AUSTPAC address 273720000. The way this is done will depend on the particular form of connection (and if the AUSTPAC connection is to a packet mode terminal, the software running in that machine).

### **8.4 A Warning on Addresses**

Some users may discover that in calling the gateway any or all of the trailing 0's may be omitted. For example the PAD command to call 27372 may be used instead of the command to call 273720000. Though this works at present Telecom have warned that at any time in the future these addresses may no longer reference the University AUSTPAC gateway.

Therefore it is recommended that users establish good habits and always use the long form of the address (273720000) which will always work.

### **8.5 Calling from the Gateway**

The gateway may also be used to control interactive sessions on computers connected to AUSTPAC as well as computers connected to many international public packet switching networks.

The first step is to gain a terminal connection to the KL DECsystem-10, then give the command:

SET HOST AUSTPAC

which will re-connect the terminal to a command interpreter on the gateway. Then giving the command "HELP" will cause a list of commands to be typed on the terminal and a brief explanation of what each command does.

Because 12 digit numbers are unwieldy and not easy to remember the gateway has a directory of sites known by name. Calls may be established using the directory name or the AUSTPAC address. Names can be inserted into the directory by request to the network consultant (Bryan Claire ext 4078) or by request to the network consultant by sending mail to NETWORK on the DECsystem10. The directory can also include any information about special initial terminal settings which are necessary for accessing a particular system.

Calls from the gateway can be made by the CALL command:

## **CALL GUNDABLUEY**

to call the site named in the directory as GUNDABLUEY or

## **CALL (X)298765432**

to call the AUSTPAC site whose address is 298765432. Note that the "(X)" is necessary when this form of command is used to ensure that the gateway knows this is an interactive call rather than a process-to-process call (such as might be used for file transfer)

## **8.6 International Access from AUSTPAC**

AUSTPAC is connected to OTC's international gateways and so access to the public X.25 networks in Austria, Belgium, Canada, France, Italy, Singapore, Sweden, Switzerland, United Kingdom and United States of America is possible. Japan should be accessible in the near future.

The gateway deliberately bars outgoing international calls and incoming reverse charge international calls because

1. The accounting system is not yet ready and charges are currently levied for international calls
2. The charging algorithm for overseas calls is quite different from the charging algorithm used on AUSTPAC and it is not known when the two will be compatible.

OTC current charges for international access are: 20c per minute connect time and 60c per 1000 characters where the characters sent and received are each rounded up to the next 1000 and then added together.

AUSTPAC and indeed most public packet switching networks charge per segment of 64 characters or part thereof with each data packet considered to contain an integral number of segments. Thus a packet with 1 byte of data is charged for 1 segment as is a packet with 64 bytes of data.

Users who wish to make extensive use of a particular overseas site would be well advised to check charge rates for calls from the overseas country to Australia and consider whether it would be possible to originate all activity from that country. For certain types of information transfer to Britain substantial savings are possible. British Telecom charge 400p (about \$7) to transfer 1000 segments (at most 64000 characters, at least 1000 characters) between Australia and Britain, OTC charge \$38-40 to transfer 64,000 characters.

In applications such as file, document or mail transfer it should be possible for the sender to ensure that most packets sent contain exactly 1 or 2 segments thus minimising the cost. For interactive applications it is not possible to ensure most packets contain exactly 1 or 2 segments. Therefore in some cases OTC charges for international access may be cheaper than the charge that would have been incurred if a similar session had been charged overseas.

## **8.7 Mail and File Transfer to Overseas Countries**

Files and Electronic mail have successfully been transferred between the DECsystem-10 and systems in the United Kingdom and Sweden. File and electronic mail transfer should be possible between the DECsystem-10 and most academic and research institutions in the United Kingdom, indeed between the DECsystem-10 and any site accessible through AUSTPAC or MIDAS and with an implementation of the United Kingdom "Blue Book" Network Independent File Transfer Protocol.

## **8.8 Further Information on the AUSTPAC Gateway**

Further information on the AUSTPAC gateway may be found in the file DOC:AUS-

PAC.MAN which should be printed rather than typed on a terminal because of its length.

Arthur Hartwig  
extension 4079

## 9. File Transfers between the DECsystem-10 and CSIRONET

There have been a number of complaints recently about file transfers between the DECsystem-10 and CSIRONET, particularly in the situation where a CSIRONET user wishes to transfer a file from the CYBER-76 to the DECsystem-10.

Since the Computer Centre plans to change to a new version of the spooling system in the near future we do not wish to make major changes to the CSIRONET file transfer spooling system until the new DEC10 spooling system is in place.

However, to make it easier for CSIRONET users to transfer files from the CYBER-76 to the DECsystem-10, a skeleton batch control file has been produced which may be edited by the user and then submitted to the batch queue. Thus the job waiting to receive the file from the CYBER-76 will run under the control of the batch system and the user will not need to stay logged in at a terminal until the file transfer completes.

The skeleton file is MIC:CSIRO.CTL which should first be typed by the user (a copy of this file is appended to the end of this article), to display the necessary system and editor commands necessary to fill in the details. The editing commands and some explanatory information are given in this file as batch comments (lines beginning with ";").

Once the editing is complete the file should be submitted to the batch system by the command

```
SUBMIT CSIRO/TIME:0:30:0/COST:$n/PRI:0
```

where n is the cost limit in dollars to be applied to the job, p is the priority which may be 10 (normal), 4 (overnight turnaround but half the charge rate of priority 10 jobs) or 2 (guaranteed 1 week turnaround but quarter the charge rate of priority 10 jobs).

File MIC:CSIRO.CTL

```
.R XFR
*RETRIE/FILE:ASCII/LOG:CSINET-
*/PROJID:xxx/PASSWO:yyy/USERID:zzz/USERPW:uuu/DECFIL:bbb/CSIFID:aaa
;This file is a skeleton batch control file to cause a file
;to be transferred from CSIRONET to the DEC10. It must be edited
;to specify parameters. Editing commands are given in this file to
;help you change it appropriately. Firstly the editor QEDIT must be invoked
;to operate on this file, so type the command:
;
;      EDIT MIC:CSIRO.CTL
;
;to the system prompt of ".". To the Editor's prompt (*) type the
;following commands:
;
;  LOC /PROJID;/C /xxx/csironet project-id;/C /yyy/csironet project password/l ; C
;/zzz/csironet user-id;/C /uuu/csironet user password/
;  C /bbb/name of file on DEC10;/C /aaa/name of file on CYBER-76/
```



; FILE CSIRO.CTL  
;

Arthur Hartwig  
extension 4079

## 10. Information Concerning Courses

The following courses will be offered in the pre-semester 1 period of 1984.

### January

|                                 |                                          |
|---------------------------------|------------------------------------------|
| Introduction to PDP-10          | January 9-10<br>2 full days 9-12 + 1-4   |
| SPSS                            | January 11-13<br>3 full days 9-12 + 1-4  |
| Introduction to PDP-10          | January 16-17<br>2 full days 9-12 + 1-4  |
| CAD/CAM                         | January 17-20<br>4 full days 9-12 + 1-4  |
| RUNOFF                          | January 18-20<br>3 full days 9-12 + 1-4  |
| Elementary BASIC<br>Programming | January 23-27<br>5 half days 9-12        |
| Typesetting                     | January 23-26<br>4 half days 1-4         |
| 1022                            | January 31-February 3<br>4 half days 9-1 |
| Introduction to PDP-10          | January 31-February 3<br>4 half days 1-4 |

### February

|                             |                                          |
|-----------------------------|------------------------------------------|
| Introduction to PDP-10      | February 6-7<br>2 full days 9-12 + 1-4   |
| Statpack                    | February 8<br>1 day 10-12 + 2-4          |
| VAX Conversion Course       | February 9<br>1 day 9-12 + 1-4           |
| Introduction to TECO Editor | February 10<br>1 day 9-12 + 1-4          |
| CAD/CAM                     | February 13-16<br>4 full days 9-12 + 1-4 |
| RUNOFF                      | February 13-17<br>5 half days 9-12       |
| SPSS                        | February 13-17<br>5 half days 1-4.30     |

### Notes:

1. Users without basic knowledge and experience of the DEC-10 system, together with some facility in the use of an editor, **MUST** attend the course "Introduction to PDP-10" before enrolling in any other course (except for the CAD/CAM course).

2. A brief description of the content of each course was provided in Newsletter N-279.
3. All of the above courses will be held in Room G13A – Hawken Building (except for the CAD/CAM course, which is held in the Graphics Room, Hawken Building).
4. Enrolments for all courses may be made by phoning extension 3018.

*Barry Maher*  
*extension 3021*

## **11. Departmental Equipment for Sale**

The Prentice Computer Centre has a Gestetner 460 duplicator for sale. Excellent condition – \$400 o.n.o.

*Dal Anderson*  
*extension 3166*

## **12. Farewell 1983**

The year 1983 has been a difficult one for users and the staff of the Centre. The assessment of new mainframe equipment does not occur very often, but when it does it involves considerable resources of the Centre, particularly at senior levels. Unfortunately, grade of service to users has suffered. A new mainframe computer will be installed in the first quarter of 1984 and the Centre can get on with its prime job of providing an improved service to users.

I would like to thank users for their cooperation and, on behalf of the staff of the Centre, to wish you a Merry Christmas and happiness and good health in 1984.

*Director*  
*extension 2189*

## **Attachment**

### **Galaxy 4, A New Version of the Spooling and Mount System**

Over the Christmas break a few changes to batch, printing and mounting will be made on the KL system. These changes should enhance the functionality of the existing software and will provide many new features. Included in the new system is automatic tape label processing. This will allow easier manipulation of tapes especially when data has to be written onto multiple tapes. Other new features are the ability to cancel mount requests and notification of completion of a mount request if you choose not to wait for it. New commands include ALLOCATE, CANCEL, DEALLOCATE, SHOW ALLOCATION and SHOW QUEUE. Existing commands that have changed are DISMOUNT, MOUNT, PLOT, PRINT, QUEUE and SUBMIT.

ALLOCATE allows you reserve a disk or tape drive for later use  
CANCEL allows you to cancel a mount, plot, print or batch request  
DEALLOCATE allows you to cancel the ALLOCATION of a device  
SHOW ALLOCATION shows you the devices you have allocated  
SHOW QUEUE lists the print, plot, batch and mount queues.

All existing commands have been updated to have the /NOTIFY option which sends you a message when your print, plot, submit or mount request is completed. The /SHOVE and /PAUSE switches are no longer supported by MOUNT and /VID: text is replaced by /REMARK:"text". New switches for MOUNT include /LABEL-TYPE to process different types of labels such as ANSI or IBM. The /DEVICE switch used for modifying a queue request (e.g., to modify a queue request from the self service printer to the main printer) is no longer available. It has been replaced by the /DESTINATION switch. The DESTINATION switch takes as its argument the node name or number where the printer is located.

#### **Examples:**

PRINT LPT20:MYJOB = /MODIFY/DEVICE:LPT01

becomes

PRINT LPT20:MYJOB/MODIFY/DESTINATION:UQKL10

or

PRINT LPT20:MYJOB/MYJOB/DESTINATION:1

SUBMIT has a new switch, /ASSIST, and its complement, /NOASSIST, to indicate that operator assistance, in mounting tapes and disks and in operator responses to PLEASE for example, is required. Batch jobs submitted to run when the system is unattended will need /NOASSIST or they will not be scheduled.

For further information, documentation is available through the online help facility, e.g., HELP MOUNT, HELP QUEUE etc., as well as at the Hawken Batch Station where an up-to-date System Commands Manual may be perused.

Ian Otto  
extension 4075



### Change of Project Programmer Number Expiry Date

**Dept:** .....

## PPN's

## SYSTEM (KL-10)

[illegible]

**Change Expiry Date to:** .....

**Signature:** .....





### Change of Project Programmer Number Expiry Date

**Dept:** .....

## UIC's

## SYSTEM (VAX)

[illegible]

**Change Expiry Date to:**.....

**Signature:** .....

